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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,804	09/29/2003	Shingo Tanaka	02887.0250	9918
22852	7590	09/12/2007		
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER ALI, FARHAD	
			ART UNIT	PAPER NUMBER
			2146	
			MAIL DATE	DELIVERY MODE
			09/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/671,804		TANAKA ET AL.	
	Examiner		Art Unit	
	Farhad Ali		2146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/21/2005 and 09/29/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2 and 5-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Brown et al. (US 6,366,622 B1).

Brown Discloses:

Claim 1

A master communication device capable of simultaneously communicating with slave communication devices within a limited number prescribed in advance, comprising:

a communication judgment unit configured to judge whether or not one of said slave communication devices which has issued communication request is currently connected ([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 28 Lines 1-5, "The INQUIRY substate is initiated in state 1302. If there is a hit, or a timeout, the status table is updated in state 1304 and the previous connection or standby state is entered in state 1306");

a communication connection unit configured to connect said slave communication device judged not to be connected by said communication judgment unit ([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 27 Lines 41-47 "The PAGE SCAN substate is initiated in state 1266 by the device which then becomes the master. If there is a hit from a slave, the slave response substate 1268 is entered. If there is no hit, the standby or connection state 1264 is reentered. Once in state 1268, if the slave responds before a timeout period, then the connected state 1270 is entered");

a connected number judgment unit configured to judge whether or not the number of said slave communication devices connected currently reaches a prescribed number not more than said limited number; a release selection unit configured to select at least one of said slave communication devices to be released, when determined to have reached said prescribed number; and a communication release unit configured to release the selected slave communication device ([Brown] Column 4 Lines 15-17: "A piconet starts with two connected devices, such as a portable PC and cellular phone, and may grow to eight connected devices" and Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 28 Lines 28-31, "First, the master establishes a beacon channel in state 1328 by placing the slave in Park Mode via a message communicating the beacon channel parameters and the slave's assignment" and [Tanaka] applicant admits in paragraph [0014] "it is common that there is an upper limit in the number of equipment to be connected in the communication standard " and "In

the Bluetooth, an effective method called as the park mode is defined for temporary release”).

Claim 2

The master communication device according to claim 1, further comprising:

a waiting registration unit configured to register in order said slave

communication device which issues said communication request, when determined to have reached said prescribed number ([Brown] Column 4 Lines 15-17 “A piconet starts with two connected devices, such as a portable PC and cellular phone, and may grow to eight connected devices”); and

a communication connection unit configured to select and connects at least one of said slave communication device in order registered in said waiting registration unit. ([Brown] Column 27 Lines 17-18, “Connection State Machine (CSM)” and Column 27 Lines 49-55, “FIG. 29B illustrates the page sequence. The CSM 1244 begins in the standby or connection state 1276 (for duration T.sub.page scan). The PAGE substate is initiated in state 1278. If there is a hit, the master response substate 1280 is entered. If there is no hit, the standby or connection state 1276 is reentered. Once in state 1280, if the master responds before a timeout period, then the connected state 1282 is entered”).

Claim 5

The master communication device according to claim 1, further comprising a connection release unit configured to release connection for said slave communication device, when the connected slave communication device has not performed data transferring during not less than a prescribed period ([Brown] Column 28 Lines 8-12, "FIG. 29E illustrates the active sequence. The CSM 1244 begins in the standby or connection state 1308. If there are periodic transactions with remote units in state 1310, then the connection state 1312 is entered. If not, the standby or connection state 1308 is reentered").

Claim 6

The master communication device according to claim 1, wherein release of connection for said slave communication device is performed by setting said slave communication device to be in a electric power saving mode ([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 28 Lines 28-33, "First, the master establishes a beacon channel in state 1328 by placing the slave in Park Mode via a message communicating the beacon channel parameters and the slave's assignment. In step 1330 the slave goes into low power Parked State and times the interval to the next beacon").

Claim 7

The master communication device according to claim 6, wherein communication for said slave communication device is performed according to a specification of Bluetooth;

said master communication device is a master equipment;

said slave communication device is a slave equipment; and

said electric power saving mode is a park mode.

([Brown] Column 28 Lines 16-28, "Referring to FIGS. 29A through 29H, there are flow diagrams illustrating the operation of the connection state machine (CSM) 1244" and "These states and substates are defined in the Bluetooth specification, version 0.7" and Column 28 Lines 28-33, "First, the master establishes a beacon channel in state 1328 by placing the slave in Park Mode via a message communicating the beacon channel parameters and the slave's assignment. In step 1330 the slave goes into low power Parked State and times the interval to the next beacon").

Claim 8

The master communication device according to claim 1, wherein communication for slave communication device is performed according to a specification of Bluetooth.

([Brown] Column 28 Lines 16-28, "Referring to FIGS. 29A through 29H, there are flow diagrams illustrating the operation of the connection state machine (CSM) 1244" and "These states and substates are defined in the Bluetooth specification, version 0.7").

Claim 9

A slave communication device used in a communication system having a master communication device which can simultaneously communicate with slave communication devices within a limited number prescribed in advance, and a communication control apparatus which controls said slave communication devices connected to said master communication device, comprising:

a master communication device connection determination unit configured to determine whether or not to be connected to said master communication device when communication request for said master communication device has been issued; ([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 27 Lines 49-55, "FIG. 29B illustrates the page sequence. The CSM 1244 begins in the standby or connection state 1276 (for duration T.sub.page scan). The PAGE substate is initiated in state 1278. If there is a hit, the master response substate 1280 is entered. If there is no hit, the standby or connection state 1276 is reentered. Once in state 1280, if the master responds before a timeout period, then the connected state 1282 is entered").

a release report signal transmission unit configured to transmit release report to said communication control apparatus, when connection for said master communication device is released; and a connection release unit configured to release connection for said master communication unit when release instruction for said master communication device is received from said communication control apparatus, during being connected to said master communication device ([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 28 Lines 28-31, "First, the master

establishes a beacon channel in state 1328 by placing the slave in Park Mode via a message communicating the beacon channel parameters and the slave's assignment" and Column 5 Lines 52-53, "Slave units can also demand to be put into HOLD mode" where Hold and Park are both types of power saving modes and [Tanaka] applicant admits in paragraph [0014] "In the Bluetooth, an effective method called as the park mode is defined for temporary release").

Claim 10

The slave communication device according to claim 9, wherein said communication for said master communication device is performed according to a specification of Bluetooth ([Brown] Column 28 Lines 16-28, "Referring to FIGS. 29A through 29H, there are flow diagrams illustrating the operation of the connection state machine (CSM) 1244" and "These states and substates are defined in the Bluetooth specification, version 0.7"); and

release of connection for said master communication device is performed by setting in a park mode ([Brown] Column 28 Lines 28-33, "First, the master establishes a beacon channel in state 1328 by placing the slave in Park Mode via a message communicating the beacon channel parameters and the slave's assignment. In step 1330 the slave goes into low power Parked State and times the interval to the next beacon").

Claim 11

A communication control apparatus which controls a slave communication device connected to a master communication device capable of simultaneously communicating with said slave communication device within a limited number prescribed in advance, comprising:

a connection report receiving unit configured to receive a connection report from said slave communication device newly connected to said master communication device; a connection information registration unit configured to register information relating to said slave communication device currently connected to said master communication device ([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 28 Lines 1-5, "The INQUIRY substate is initiated in state 1302. If there is a hit, or a timeout, the status table is updated in state 1304 and the previous connection or standby state is entered in state 1306");

a connected number judgment unit configured to judge that the number of said slave communication device connected to said master communication device reaches a prescribed number not more than the limited number, based on information registered in said connection information registration unit; a communication device selection unit configured to select at least one of said slave communication devices that connection for said master communication device is to be released, when determined to have reached said prescribed number; and a release instruction unit configured to transmit release instruction to said slave communication device selected by said communication device selection unit ([Brown] Column 4 Lines 15-17 "A piconet starts with two connected devices, such as a portable PC and cellular phone, and may grow to eight

connected devices” and Column 27 Lines 17-18, “Connection State Machine (CSM)” and Column 28 Lines 28-31, “First, the master establishes a beacon channel in state 1328 by placing the slave in Park Mode via a message communicating the beacon channel parameters and the slave's assignment” and [Tanaka] applicant admits in paragraph [0014] “it is common that there is an upper limit in the number of equipment to be connected in the communication standard “ and “In the Bluetooth, an effective method called as the park mode is defined for temporary release”).

Claim 12

The slave communication device according to claim 11, wherein communication between said master communication device and said slave communication device is performed according to a specification of Bluetooth; and a release of connection between said master communication device and said slave communication device is performed to be set in a park mode ([Brown] Column 28 Lines 16-28, “Referring to FIGS. 29A through 29H, there are flow diagrams illustrating the operation of the connection state machine (CSM) 1244” and “These states and substates are defined in the Bluetooth specification, version 0.7” and Column 28 Lines 28-33, “First, the master establishes a beacon channel in state 1328 by placing the slave in Park Mode via a message communicating the beacon channel parameters and the slave's assignment. In step 1330 the slave goes into low power Parked State and times the interval to the next beacon”).

Claim 13

A communication system, comprising:

at least one of slave communication devices; and

a master communication device configured to be able to communicate simultaneously with said slave communication device within a limited number prescribed in advance, ([Brown] Column 4 Lines 15-17 "A piconet starts with two connected devices, such as a portable PC and cellular phone, and may grow to eight connected devices")

wherein said master communication device includes:

a communication judgment unit configured to judge whether or not one of said slave communication devices which has issued communication request is currently connected([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 28 Lines 1-5, "The INQUIRY substate is initiated in state 1302. If there is a hit, or a timeout, the status table is updated in state 1304 and the previous connection or standby state is entered in state 1306");

a communication connection unit configured to connect said slave communication device determined not to be connected by said communication judgment unit ([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 27 Lines 41-47 "The PAGE SCAN substate is initiated in state 1266 by the device which then becomes the master. If there is a hit from a slave, the slave response substate 1268 is entered. If there is no hit, the standby or connection state 1264 is

reentered. Once in state 1268, if the slave responds before a timeout period, then the connected state 1270 is entered");

a connected number judgment unit configured to judge whether or not the number of said slave communication devices connected currently reaches a prescribed number not more than said limited number; a release selection unit configured to select at least one of said slave communication devices to be released, when determined to have reached said prescribed number; and a communication release unit configured to release the selected slave communication device ([Brown] Column 4 Lines 15-17 "A piconet starts with two connected devices, such as a portable PC and cellular phone, and may grow to eight connected devices" and Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 28 Lines 28-31, "First, the master establishes a beacon channel in state 1328 by placing the slave in Park Mode via a message communicating the beacon channel parameters and the slave's assignment" and [Tanaka] applicant admits in paragraph [0014] "it is common that there is an upper limit in the number of equipment to be connected in the communication standard " and "In the Bluetooth, an effective method called as the park mode is defined for temporary release").

Claim 14

The communication system according to claim 13, wherein said master communication device includes:

a waiting registration unit configured to register said slave communication device which has issued said communication request in order, when determined to have reached said prescribed number ([Brown] Column 4 Lines 15-17 "A piconet starts with two connected devices, such as a portable PC and cellular phone, and may grow to eight connected devices"); and

a communication connection unit configured to select and connects at least one of said slave communication devices in order registered to said waiting registration unit. ([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 27 Lines 49-55, "FIG. 29B illustrates the page sequence. The CSM 1244 begins in the standby or connection state 1276 (for duration T.sub.page scan). The PAGE substate is initiated in state 1278. If there is a hit, the master response substate 1280 is entered. If there is no hit, the standby or connection state 1276 is reentered. Once in state 1280, if the master responds before a timeout period, then the connected state 1282 is entered").

Claim 15

The communication system according to claim 13, wherein said slave communication device includes:

a master communication device connection judgment unit configured to judge whether or not to be connected to said master communication device, when communication request for said master communication device has been issued ([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 27 Lines 49-

55, "FIG. 29B illustrates the page sequence. The CSM 1244 begins in the standby or connection state 1276 (for duration T.sub.page scan). The PAGE substate is initiated in state 1278. If there is a hit, the master response substate 1280 is entered. If there is no hit, the standby or connection state 1276 is reentered. Once in state 1280, if the master responds before a timeout period, then the connected state 1282 is entered");

a release report signal supply unit configured to transmit a release report to said communication control apparatus when connection for said master communication device is released; and a connection release unit configured to release connection for said master communication device when release instruction for said master communication device is received from said communication control apparatus, during being connected to said master communication apparatus ([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 28 Lines 28-31, "First, the master establishes a beacon channel in state 1328 by placing the slave in Park Mode via a message communicating the beacon channel parameters and the slave's assignment" and Column 5 Lines 52-53, "Slave units can also demand to be put into HOLD mode" where Hold and Park are both types of power saving modes and [Tanaka] applicant admits in paragraph [0014] "In the Bluetooth, an effective method called as the park mode is defined for temporary release"),

wherein said communication control apparatus includes:

a connection report receiving unit configured to receive a connection report from said slave communication device newly connected to said master communication device; a connection information registration unit configured to register information

relating to said slave communication devices currently connected to said master communication device ([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 28 Lines 1-5, "The INQUIRY substate is initiated in state 1302. If there is a hit, or a timeout, the status table is updated in state 1304 and the previous connection or standby state is entered in state 1306");

a connected number judgment unit configured to judge whether or the number of said slave communication device reaches a prescribed number not more than said limited number, based on the information registered to said connection information registration unit; a communication device selection unit configured to select at least one of said slave communication devices of which connection for said master communication device is to be released, when determined to have reached said prescribed number; and a release instruction unit configured to transmit release instruction to said slave communication device selected by said communication device selection unit ([Brown] Column 4 Lines 15-17 "A piconet starts with two connected devices, such as a portable PC and cellular phone, and may grow to eight connected devices" and Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 28 Lines 28-31, "First, the master establishes a beacon channel in state 1328 by placing the slave in Park Mode via a message communicating the beacon channel parameters and the slave's assignment" and [Tanaka] applicant admits in paragraph [0014] "it is common that there is an upper limit in the number of equipment to be connected in the communication standard " and "In the Bluetooth, an effective method called as the park mode is defined for temporary release").

Claim 16

The slave communication device according to claim 13, wherein communication between said master communication device and said slave communication device is performed according to a specification of Bluetooth; and a release of connection between said master communication device and said slave communication device is performed by setting in a park mode ([Brown] Column 28 Lines 16-28, "Referring to FIGS. 29A through 29H, there are flow diagrams illustrating the operation of the connection state machine (CSM) 1244" and "These states and substates are defined in the Bluetooth specification, version 0.7" and Column 28 Lines 28-33, "First, the master establishes a beacon channel in state 1328 by placing the slave in Park Mode via a message communicating the beacon channel parameters and the slave's assignment. In step 1330 the slave goes into low power Parked State and times the interval to the next beacon").

Claim 17

A communication control program capable of reading by a computer which performs communication between at least one of slave communication devices, and a master communication device capable of simultaneously communicating with said slave communication devices within a limited number prescribed in advance, comprising:

judging by said master communication device whether or not one of said slave communication devices which has issued communication request is connected currently

([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 28 Lines 1-5, "The INQUIRY substate is initiated in state 1302. If there is a hit, or a timeout, the status table is updated in state 1304 and the previous connection or standby state is entered in state 1306");

connecting said slave communication devices judged that said slave communication device is not connected currently, to said master communication device ([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 27 Lines 41-47 "The PAGE SCAN substate is initiated in state 1266 by the device which then becomes the master. If there is a hit from a slave, the slave response substate 1268 is entered. If there is no hit, the standby or connection state 1264 is reentered. Once in state 1268, if the slave responds before a timeout period, then the connected state 1270 is entered");

judging by said master communication device whether or not the number of said slave communication devices connected currently reaches a prescribed number not more than said a limited number; selecting by said master communication device at least one of said slave communication devices to be released, when determined to have reached said prescribed number; and releasing the selected slave communication device by said master communication device ([Brown] Column 4 Lines 15-17 "A piconet starts with two connected devices, such as a portable PC and cellular phone, and may grow to eight connected devices" and Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 28 Lines 28-31, "First, the master establishes a beacon channel in state 1328 by placing the slave in Park Mode via a message communicating

the beacon channel parameters and the slave's assignment" and [Tanaka] applicant admits in paragraph [0014] "it is common that there is an upper limit in the number of equipment to be connected in the communication standard " and "In the Bluetooth, an effective method called as the park mode is defined for temporary release").

Claim 18

The communication control program according to claim 17, further comprising:

judging by said master communication device whether or not one of said slave communication devices which has issued communication request is connected currently ([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 28 Lines 1-5, "The INQUIRY substate is initiated in state 1302. If there is a hit, or a timeout, the status table is updated in state 1304 and the previous connection or standby state is entered in state 1306");

judging by said master communication device whether or not the number of said slave communication devices connected currently reaches a prescribed number not more than said limited number ([Brown] Column 4 Lines 15-17 "A piconet starts with two connected devices, such as a portable PC and cellular phone, and may grow to eight connected devices");

registering in order said slave communication device which has issued the communication request to a waiting registration unit of said master communication device, when determined to have reached said prescribed number; selecting at least one of said slave communication devices and connecting it to said master

communication device, in order registered to said waiting registration unit ([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 27 Lines 49-55, "FIG. 29B illustrates the page sequence. The CSM 1244 begins in the standby or connection state 1276 (for duration T.sub.page scan). The PAGE substate is initiated in state 1278. If there is a hit, the master response substate 1280 is entered. If there is no hit, the standby or connection state 1276 is reentered. Once in state 1280, if the master responds before a timeout period, then the connected state 1282 is entered"); and

selecting by said master communication device at least one of said slave communication devices to be released, when determined to have reached said prescribed number ([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 28 Lines 28-31, "First, the master establishes a beacon channel in state 1328 by placing the slave in Park Mode via a message communicating the beacon channel parameters and the slave's assignment" and [Tanaka] applicant admits in paragraph [0014] "In the Bluetooth, an effective method called as the park mode is defined for temporary release").

Claim 19

The communication control program according to claim 17, comprising:

judging by said slave communication devices whether or not to be connected to said master communication device, when communication request for said master communication device is issued ([Brown] Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 27 Lines 49-55, "FIG. 29B illustrates the page sequence.

The CSM 1244 begins in the standby or connection state 1276 (for duration T.sub.page scan). The PAGE substate is initiated in state 1278. If there is a hit, the master response substate 1280 is entered. If there is no hit, the standby or connection state 1276 is reentered. Once in state 1280, if the master responds before a timeout period, then the connected state 1282 is entered”);

transmitting a release report from said slave communication device to said communication control apparatus when connection for said master communication device is released; releasing connection between said master communication device and said slave communication device when a release instruction for said master communication device is received from said communication control apparatus, during being connected to said master communication device ([Brown] Column 27 Lines 17-18, “Connection State Machine (CSM)” and Column 28 Lines 28-31, “First, the master establishes a beacon channel in state 1328 by placing the slave in Park Mode via a message communicating the beacon channel parameters and the slave’s assignment” and Column 5 Lines 52-53, “Slave units can also demand to be put into HOLD mode” where Hold and Park are both types of power saving modes and [Tanaka] applicant admits in paragraph [0014] “In the Bluetooth, an effective method called as the park mode is defined for temporary release”).;

receiving by said communication control apparatus a connection report from said slave communication devices newly connected to said master communication device; registering information relating to said slave communication devices currently connected to said master communication device, to said communication control apparatus ([Brown]

Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 28 Lines 1-5, "The INQUIRY substate is initiated in state 1302. If there is a hit, or a timeout, the status table is updated in state 1304 and the previous connection or standby state is entered in state 1306");

judging by said communication control apparatus whether or not the number of said slave communication devices connected to said master communication device reaches a prescribed number not more than said limited number, based on the registered information; selecting by said communication control apparatus at least one of said slave communication devices of which connection for master communication device is to be released, when determined to have reached said prescribed number; and transmitting a release instruction from said communication control apparatus to the selected slave communication device ([Brown] Column 4 Lines 15-17 "A piconet starts with two connected devices, such as a portable PC and cellular phone, and may grow to eight connected devices" and Column 27 Lines 17-18, "Connection State Machine (CSM)" and Column 28 Lines 28-31, "First, the master establishes a beacon channel in state 1328 by placing the slave in Park Mode via a message communicating the beacon channel parameters and the slave's assignment" and [Tanaka] applicant admits in paragraph [0014] "it is common that there is an upper limit in the number of equipment to be connected in the communication standard " and "In the Bluetooth, an effective method called as the park mode is defined for temporary release").

Claim 20

The slave communication device according to claim 17, wherein communication between said master communication device and said slave communication device is performed according to a specification of Bluetooth; and a release of connection between said master communication device and said slave communication devices is performed by setting in a park mode ([Brown] Column 28 Lines 16-28, "Referring to FIGS. 29A through 29H, there are flow diagrams illustrating the operation of the connection state machine (CSM) 1244" and "These states and substates are defined in the Bluetooth specification, version 0.7" and Column 28 Lines 28-33, "First, the master establishes a beacon channel in state 1328 by placing the slave in Park Mode via a message communicating the beacon channel parameters and the slave's assignment. In step 1330 the slave goes into low power Parked State and times the interval to the next beacon").

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (US 6,366,622 B1) in view of Fujita (US 7,088,691 B2).

Claims 3 and 4

Regarding claims 3 and 4:

Brown does not specifically disclose the master communication device according to claim 1, wherein said release selection unit selects by priority said slave communication device which has performed the earliest communication or said slave device which has been connected for the longest time among said slave communication devices connected currently.

Fujita discloses however: ([Fujita] Column 4 Lines 61-67 "Then the PDA 6 performs the broadcasting process for priority use of the network to inform each slave station within the wireless communication network 1 of priority use of the wireless communication network 1 (step S3). This process makes each slave station move to the park mode (standby state) in which the slave station does not make a request for communication, thus limiting each slave station's use of the wireless communication network 1").

It would have been obvious at the time of the invention to one of ordinary skill in the art to combine Brown's Method for wireless communication with Fujita's communication equipment. Brown teaches a method for devices to communicate using a Bluetooth protocol and Fujita teaches communication equipment that utilizes the Bluetooth protocol. Although Brown teaches the releasing of devices, it does not specifically disclose the method by which it chooses the device to be released. Incorporating Fujita's teaching of releasing all devices, which do not have priority use

with Brown's Method, will achieve the same results as the applicants disclosed invention, and would provide more bandwidth and accessibility to the priority devices.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farhad Ali whose telephone number is (571) 270-1920. The examiner can normally be reached on Monday thru Friday, 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey C. Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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F.A.



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